

U.S. Application No. 10/646,318, filed August 22, 2003

Attorney Docket No. 14366US02

Amendment dated December 8, 2008

Accompanying Request for Continued Examination (RCE) mailed December 8, 2008

Amendments to the Claims begin on page 2.

Remarks begin on page 8.

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

1-55. (Cancelled)

56. (Currently Amended) Apparatus A handheld wireless communications device having at least one antenna, comprising:

a terminal that has a microphone and a speaker that provide voice input/output, wherein the terminal provides a voice recognition control system that uses the microphone, wherein the terminal provides a graphical user interface that includes a touch-sensitive display;

a wireless ~~communications module comprising~~ a transceiver arranged to transmit and receive radio frequency signals, the transceiver being operatively coupled with the at least one antenna, the transceiver being operatively coupled to a rechargeable battery;

a CCD sensor that senses an optical image; and

at least one antenna coupled with the transceiver and embedded within the ~~communications module~~; and

a connector arranged to ~~removably~~ couple the ~~communications module~~ wireless transceiver with the terminal and to transmit signals, wherein the terminal is coupled with the connector and is arranged to standardize logic levels and a format of the signals transmitted over

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~~the connector such that the terminal may be engaged by the communications module through the connector without adjustment of the communications module.~~

57. (Currently Amended) The ~~apparatus~~ handheld wireless communications device of claim 56 wherein the at least one antenna comprises a flat antenna.

58. (Currently Amended) The ~~apparatus~~ handheld wireless communications device of claim 56 wherein the at least one antenna comprises a pair of flat antennas.

59. (Currently Amended) The ~~apparatus~~ handheld wireless communications device of claim 56 wherein the at least one antenna comprises two antennas having different structure relative to each other.

60. (Currently Amended) In a communication system including a portable terminal, the terminal comprising:

a microphone and a speaker that provide voice input/output, the microphone being used with a voice recognition control system;

a touch-sensitive graphical display that is capable of being operatively coupled to a rechargeable battery;

a CCD sensor that senses a wireless image signal;

a wireless communications module comprising a transceiver arranged to transmit and receive radio frequency signals, the module being of such a size and weight as to be handheld ~~maneuverable with only one hand of a user;~~

at least one antenna coupled with the transceiver and embedded within the communications module; and

a connector arranged to ~~releasably~~ engage the communications module from the terminal and to transmit signals, wherein the terminal is coupled with the connector and is arranged to standardize logic levels and a format of the signals transmitted over the connector ~~such that the terminal may be engaged by the communications module through the connector without adjustment of the communications module or the terminal.~~

61. (Previously Presented) The terminal of claim 60 wherein the at least one antenna comprises a flat antenna.

62. (Previously Presented) The terminal of claim 60 wherein the at least one antenna comprises a pair of flat antennas.

63. (Previously Presented) The terminal of claim 60 wherein the at least one antenna comprises two antennas having different structure relative to each other.

64. (Previously Presented) The terminal of claim 60 wherein battery power is applied to the communications module from the terminal through a switch and wherein the terminal is responsive to the non-operation of the communications module by opening the switch and by removing power from the communications module.

65. (Currently Amended) Apparatus for use with a portable terminal comprising:
a microphone and a speaker that provide voice input/output, the microphone being used with a voice recognition control system;

a user interface that includes a touch-sensitive graphical display, the touch-sensitive graphical display being operatively coupled to a rechargeable battery;

a wireless communications module comprising a transceiver arranged to transmit and receive radio frequency signals, the module having such a size and weight as to be handheld
~~maneuverable with only one hand of the user;~~

at least one antenna coupled with the communications module and embedded within the communications module; and

a connector arranged to ~~releasably~~ engage the communications module with the terminal and to transmit signals, ~~[[;]]~~ and

~~a housing enclosing the terminal and defining an opening arranged to receive the communications module and to guide the module into contact with the connector, wherein the terminal is arranged to standardize logic levels and a format of the signals transmitted over the~~

~~connector such that terminal may be engaged by the communications module through the connector without adjustment of the communications module or the terminal.~~

66. (Previously Presented) The apparatus of claim 65 wherein the at least one antenna comprises a flat antenna.

67. (Currently Amended) The apparatus of claim 65 wherein the at least one flat antenna comprises a pair of flat antennas.

68. (Previously Presented) The apparatus of claim 65 wherein the at least one antenna comprises two antennas having different structure relative to each other.

69. (Currently Amended) Apparatus for use with a portable terminal including a connector and having a handheld size and weight ~~carriable by a user~~, the apparatus comprising a microphone and a speaker that provide voice input/output, the microphone being used with a voice recognition control system, a graphical user interface that provides a touch-sensitive display, the graphical user interface being operatively coupled to a rechargeable battery, a CCD sensor that senses an optical image, a wireless communications module having a generally flat rectangular shape and having such a size and weight as to be handheld ~~maneuverable by only one hand of a user~~, the module being ~~releasably~~ coupled to the terminal through the connector and

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comprising a transceiver arranged to transmit and receive radio frequency signals ~~and comprising an antenna embedded in the module and coupled to the transceiver~~, the terminal being engaged by the communications module through the connector.

70. (Currently Amended) The apparatus of claim 69 comprising ~~wherein the at least one antenna comprises~~ a flat antenna.

71. (Currently Amended) The apparatus of claim 69 comprising ~~wherein the at least one antenna comprises~~ a pair of flat antennas.

72. (Currently Amended) The apparatus of claim 69 71 wherein the ~~at least one antenna comprises two~~ pair of antennas having different structure relative to each other.